

AMENDMENTS TO THE CLAIMS:

1 1. (Currently amended) A probe apparatus for testing a circuit chip, said probe
2 apparatus comprising a probe group having two or more probes, each of said two
3 or more probes having a conductive core, an insulation layer, and a tip, at least
4 two of said two or more probes having a common contacting center within a probe
5 target area, and each of said two or more probes independently, conductively 324 / 754 +
6 contacting within a guiding boundary ~~for independently conductively contacting~~ a
7 single terminal of said circuit chip and allowing a test path resistance be measured
8 without affecting said circuit chip.

1 2. (Previously amended) The probe apparatus of claim 1, further comprising an
2 electronic circuit capable of recognizing said test path resistance and
3 correspondingly compensating a voltage drop of an operational signal passing
4 through at least one of said probes.

1 3. (Original) The probe apparatus of claim 2, wherein said probe group comprises
2 three probes and said electronic circuitry is capable of recognizing
3 a) a first path resistance of said resistance condition between said first and
4 said second contacting means along said single test terminal;
5 b) a second path resistance of said resistance condition between said first and
6 said third contacting means along said single test terminal;
7 c) a third path resistance of said resistance condition between said second and
8 said third contacting means along said single test terminal; and
9 wherein said electronic circuitry is capable of compensating said voltage drop
10 individually and in correspondence to one, two or three operational signal paths
11 related to said probes.

1 4. (Original) The probe apparatus of claim 2, wherein said probe group comprises
2 four probes and said electronic circuitry is capable of recognizing said test path
3 resistance according to 4-Wire Ohm's Measurement.

1 5. (Original) The probe apparatus of claim 1, wherein at least one of said two or
2 more probes is a buckling beam.

1 6. (Original) The probe apparatus of claim 1, wherein said probe group is bundled in
2 a single perforation of a sheath being part of said probe apparatus.

1 7. (Original) The probe apparatus of claim 6, wherein said single perforation is a long
2 hole.

1 8. (Original) The probe apparatus of claim 6, wherein said single perforation is a
2 circular hole.

1 9. (Original) The probe apparatus of claim 1, wherein said two or more probes have
2 probe tips essentially concentrically arranged in correspondence to a rotation axis
3 of said single terminal having a rotationally symmetric and non planar contact
4 surface such that said two or more probes contact said single terminal in a self
5 centering fashion.

1 10. (Original) The probe apparatus of claim 9, wherein said probe tips are essentially
2 spherical.

1 11. (Original) A method for compensating a voltage drop of an operational signal
2 passing through an operational signal path having a constant resistance and a
3 variable resistance related to a contact quality of a probe and a terminal of said
4 operational signal path, said method comprising the steps of:
5 contacting said terminal with a group of two or more of said probes;
6 recognizing a path resistance along said probes of said group, said
7 terminal and interfaces between said probes and said terminal;
8 deriving an operational signal path resistance from said path resistance;
9 and

10 compensating said voltage drop in correspondence to said operational signal path
11 resistance.

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12. (Previously amended) The method of claim 11, wherein said contacting is provided by
said group including a first, a second and a third of said probes, wherein said
recognizing includes recognizing a first, second and a third path resistance
corresponding to said first, second and said third of said probes, and wherein said
deriving includes deriving an absolute value of a first, second and third operational
signal path resistance corresponding to said first, second and said third path
resistance.
